

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/107,787	06/30/1998	JOHN S. BUCHANAN	10000-1	8519	
7.	590 04/01/2003				
Joseph C. Wang			EXAMINER		
ExxonMobil Research and Engineering Company PO Box 900			BUSHEY, CHARLES S		
Annandale, NJ	08801-0900		ART UNIT	PAPER NUMBER	
			1724		
			DATE MAILED: 04/01/2003	}	

Please find below and/or attached an Office communication concerning this application or proceeding.

				CX
•		Application No.	Applicant(s)	
		09/107,787	BUCHANAN ET	AL.
Office Action Summary		Examiner	Art Unit	
		Scott Bushey	1724	
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet	with the correspondence a	ddress
THE I - Exter after - If the - If NO - Failu - Any r	ORTENED STATUTORY PERIOD FOR REPLICATION OF THIS COMMUNICATION. INSIGN OF THIS COMMUNICATION. INSIGN OF THIS COMMUNICATION. INSIGN OF THIS COMMUNICATION. INSIGN OF THIS COMMUNICATION. IN EVEN OF THIS COMMUNICATION. IN	136(a). In no event, however, may oly within the statutory minimum of the will apply and will expire SIX (6) Mode, cause the application to become	a reply be timely filed thirty (30) days will be considered time ONTHS from the mailing date of this ABANDONED (35 U.S.C. § 133).	ely. communication.
1)	Responsive to communication(s) filed on 11	<u>March 2003</u> .		
2a)⊠		his action is non-final.		
3) 🗌	Since this application is in condition for allow closed in accordance with the practice under the condition of Claims			he merits is
· ·	Claim(s) 20 is/are pending in the application.			
-	4a) Of the above claim(s) is/are withdra			
	Claim(s) is/are allowed.	wii iioiii consideration.		
·	Claim(s) <u>20</u> is/are rejected.			
·	Claim(s) is/are objected to.	an alaatian raaviramant		
•	Claim(s) are subject to restriction and/ ion Papers	or election requirement.		
9) 🗌 .	The specification is objected to by the Examin	er.		
10) 🔲 -	The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to b	y the Examiner.	
	Applicant may not request that any objection to ti	ne drawing(s) be held in abo	eyance. See 37 CFR 1.85(a)	
11) 🔲 -	The proposed drawing correction filed on	_ is: a)□ approved b)□	disapproved by the Exami	ner.
	If approved, corrected drawings are required in re	eply to this Office action.		
12) 🔲 🗀	The oath or declaration is objected to by the E	xaminer.		
Priority u	ınder 35 U.S.C. §§ 119 and 120			
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C	C. § 119(a)-(d) or (f).	
a)[☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority documen	ts have been received.		
	2. Certified copies of the priority documen	ts have been received in	Application No	
* S	3. Copies of the certified copies of the pricapplication from the International Bee the attached detailed Office action for a lis	ureau (PCT Rule 17.2(a)).	l Stage
14)⊠ A	acknowledgment is made of a claim for domes	tic priority under 35 U.S.	C. § 119(e) (to a provisiona	al application).
) ☐ The translation of the foreign language pr Acknowledgment is made of a claim for domes	• •		
Attachment	-	•	•	
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	ew Summary (PTO-413) Paper N of Informal Patent Application (P	
S. Patent and Tr		action Summary	Part o	of Paper No. 26

Art Unit: 1724

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claim 20 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1).

Applicant should note that the liquid enters the cyclonic device from a tray located outside of the sidewalls of the device. The liquid collects on the tray until it reaches a level equal to the top end of the plenum or downcomer (7), at which time it flows downwardly through (7) to the lower end thereof wherein the liquid exits pipe (7) through the sidewall thereof near the bottom end of the cyclonic region. Applicant should also recognize that outlets (5) arranged in the sidewall of the cyclonic device are provided between the first set of spin devices (11) and the second set of spin devices (12), the second set of spin devices being arranged "substantially at

Art Unit: 1724

the midpoint" of the cyclonic device and occupying about 15% of the elevation of the cyclonic device.

Instant claim 20 is a reinstatement of cancelled claim 11, as was pending and addressed in the previous Office action, mailed July 24, 2002. The following paragraph, which appeared in said previous Office action applies equally well to instant claim 20 as it did then to cancelled claim 11.

Applicant should note that the amended language of claim 11 (now cancelled and reinstated as current claim 20) is essentially equivalent to the language that has been replaced by the amendment. Specifically, claim 11 (now cancelled and reinstated as current claim 20) previously stated that the spin vanes were located "at about the midpoint" of the sidewall, while the amended language states that the spin vanes are located "substantially at the midpoint" of the sidewall. It is the Examiner's position that "substantially" is as broad as "about", especially when used to modify the term "midpoint", which as defined by the 10th Edition of Merriam Webster's Collegiate Dictionary as, "a point at or near the center or middle". Clearly since the term being modified (midpoint), by definition is not an exact term, a none exact modifier (either about or substantially) cannot be expected to provide such a pinpoint definition to overcome a reference teaching such as that provided by Sheinman.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1724

- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheinman.

Sheinman (Figs. 1 and 2; col. 2, line 26 through col. 3, line 1) as has been applied above substantially disclose applicant's invention as recited by instant claim 20, except for the spin vanes being located precisely at the midpoint. While the Examiner does not agree that the instant claim requires location of the spin vanes precisely at the center point between the ends of the sidewall of the device, it would have been obvious for an artisan at the time of the invention, to modify the location of the spin vanes (12) of Sheinman to be located at any location near to and including the precise center point between the ends of the sidewall of the device, since such would not appreciably modify the operation or purposeful function of the device. Applicant should note that the entire discussion as set forth in paragraph 2 above is incorporated herein by reference.

Response to Arguments

6. Applicant's arguments filed January 4, 2002 have been fully considered but they are not persuasive. Applicant's arguments as filed January 4, 2002 have been fully discussed and rebutted in the rejection statements above. It is noted that the amendment filed March 11, 2003

Art Unit: 1724

has presented new claim 20, the only claim currently pending in the application, which claim 20 is identical to claim 11, as presented in the amendment filed January 4, 2002 and addressed in the Office action mailed on July 24, 2002. Applicant has elected not to present any new grounds of argument with the current amendment, and is relying solely on arguments of record, which were addressed in the Office action mailed July 24, 2002, which Office action has essentially been repeated herein.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is (703) 308-3581. The examiner can normally be reached on Monday-Thursday 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Simmons can be reached on (703) 308-1972. The fax phone numbers for

Art Unit: 1724

the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Scott Bushey Primary Examiner Art Unit 1724

csb March 25, 2003

3-25-03